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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/827,465  
Filing Date: April 19, 2004  
Appellant(s): TURNER ET AL.

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Duke Taylor  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 7/30/2007 appealing from the Office action mailed 1/30/2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,656,626	MOOTY et al.	12-2003
5,189,570	MAEDA et al.	2-1993

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

Claims 23-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mooty et al. (US 6,656,626) in view of Maeda et al. (US 5,189,570).

With regard to claim 23, the reference of Mooty et al. discloses a power tool housing (102) having a mechanism for ejecting a battery pack (108), comprising: the housing including motor portion (103) and a handle portion (104) extending away from the electric motor portion and a base portion (106) at a distal end of the handle portion away from the motor portion to form a terminus of the power tool housing (102), a frame (115 mounting surface) in the base portion (106); a cavity (114 opening) in the frame for receiving a battery pack (108) at the distal end of the handle portion (104); a member (116, 119) for receiving a member (152,155) on the battery pack (108) to couple the battery pack with the power tool (100); a biasing member (125, 130) in the cavity (114), the biasing member (125, 130) for ejecting (releasable) the battery pack (108) from the receiving member (116, 119); and the battery pack (108) received in the receiving member (116, 119) so that the battery pack is in contact with the biasing member (125, 130).

The reference of Mooty et al. discloses the claimed subject matter but lacks the specific teaching of the battery pack secured on the frame, and in contact with the biasing member in a compressed condition.

The reference of Maeda et al. teaches the claimed feature as shown in Figures 9 and 10 wherein the battery pack (70) is secured and in contact with the biasing member (81) in compressed condition, further the battery pack is ejected and released from the frame.

In view of the teaching of the references of Maeda et al., it would have been obvious to one skilled in the art at the time of the invention to modify the battery pack receiving member of Mooty et al. such that the secured battery pack compresses the biasing member in order to more effectively detach of the battery pack from the frame.

With regard to claim 24, the power tool housing of Mooty et al., includes the cavity (114 opening) defined by a pair of opposing side walls and an end wall adjoining the opposing side walls as shown in Figures 7A and 7B.

With regard to claim 25, the receiving member (114 opening ) of power tool housing of Mooty et al. includes a pair of extending and opposing rails on each side wall as shown in Figure 6.

With regard to claim 26, the power tool housing of Mooty et al. includes channels formed adjacent the side walls and between the rails and frame as shown in Figure 6, for receiving mating rails (152, 155) on the battery pack (108).

With regard to claim 27, the power tool housing Mooty et al. includes at least one helical spring (125).

With regard to claim 28, the modified power tool housing of Mooty et al. includes the biasing member extending from an end wall of the frame.

With regard to claim 29, the reference of Mooty et al. discloses a power tool (100), comprising: a battery pack (108); a housing (102), the housing (102) including a motor portion (103), a handle portion (104) adjacent the motor portion (103) and extending away from the motor portion and a base portion (106) at a distal end of the handle portion (104) away from the motor portion (103) forming a terminus of the housing (102), a motor (electric motor) in the housing (102), an output (105) coupled with the motor (electric motor); an activation member (107) for activating the motor (electric motor); a mechanism (securement) on base portion (106) of the housing (102) for receiving a battery pack (108) at the distal end of the handle portion (104) including: a frame (115 mounting surface); a cavity (114 opening) in the frame (115) for receiving a battery pack (108), a member (116, 119) for receiving a member (152,155) on the battery pack (108) to couple the battery pack with the housing (102); a biasing member (125, 130) in the cavity (114 opening), the biasing member (125, 130) for ejecting the battery pack (108) from the housing (102), and the battery pack (108) received in the receiving member (116, 119) so that the battery pack (108) is in contact with the biasing member (125, 130) such that the battery pack(108) is secured on the housing (102).

The reference of Mooty et al. discloses the claimed subject matter but lacks the specific teaching of the battery pack secured on the frame, and in contact with the biasing member in a compressed condition.

The reference of Maeda et al. teaches the claimed feature as shown in Figures 9 and 10 wherein the battery pack (70) is secured and in contact with the biasing member (81) in compressed condition, further the battery pack is ejected and released from the frame.

In view of the teachings of the reference of Maeda et al., would have been obvious to one skilled in the art at the time of the invention to modify the battery pack receiving member of Mooty et al. such that the secured battery pack compresses the biasing member in order to more effectively detach of the battery pack from the frame.

With regard to claim 30, the power tool (100) of Mooty et al., includes the cavity (114 opening) defined by a pair of opposing side walls and an end wall adjoining the opposing side walls as shown in Figures 7A and 7B.

With regard to claim 31, the receiving member (114 opening ) of the power tool of Mooty et al. includes a pair of extending and opposing rails on each side wall as shown in Figure 6.

With regard to claim 32, the power tool of Mooty et al. includes channels formed adjacent the side walls and between the rails and frame as shown I Figure 6, for receiving mating rails (152, 155) on the battery pack (108).

With regard to claim 33, the power tool of Mooty et al. includes at least one helical spring (125).

With regard to claim 34, the modified power tool of Mooty et al. includes the biasing member extending from an end wall of the frame.

With regard to claim 35, the battery pack of the power tool of Mooty et al. includes a pair of rails (152, 155) mating in the channels as shown in Figure 6.

With regard to claim 36, the battery pack (108) rails of the power tool of Mooty et al. includes an upper portion (154 Fig.11), lower portion (158 Fig. 11) and a channel as shown in Figure 11 between the upper and lower portions.

With regard to claim 37, the modified power tool of Mooty et al. includes the at least one helical spring which is capable of partially ejecting the battery pack.

With regard to claim 38, the power tool of Mooty et al. includes as shown in Figures 13A, 13B and 13C, wherein the battery rails slide in the channels and the frame rails suspend the battery pack from the tool housing.

#### **(10) Response to Argument**

##### **A. Examiner interpretation of the independent claim**

During patent examination of the claims, the pending claims must be given their broadest reasonable interpretation consistent with the specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005). *See also* MPEP § 2111. Moreover, while the claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, *this is not the mode of claim interpretation to be applied during examination*. During examination, the claims must be interpreted as broadly as their terms reasonably allow. *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004). *See also* MPEP § 2111.01.

Independent claim 23 recites:



A power tool housing having a mechanism for ejecting a battery pack, comprising: said housing including motor portion and a handle portion extending away from said motor portion, and a base portion at a distal end of said handle portion away from said motor portion to form a terminus of said power tool housing; a frame in said base portion; a cavity in said frame for receiving a battery pack at the distal end of the handle portion; a member for receiving a member on the battery pack to couple the battery pack with the power tool; a biasing member in said cavity, said biasing member for ejecting said battery pack from said receiving member; and said battery pack received in said receiving member so that said battery pack is in contact with said biasing member such that when the battery pack is secured on said frame, said biasing member is in a compressed condition and when the battery pack is released from said frame, said biasing member ejects the battery pack from the frame.

Independent claim 29 recites:

A power tool, comprising: a battery pack; a housing, said housing including a motor portion, a handle portion adjacent said motor portion and extending away from said motor portion, and a base portion at a distal end of said handle portion away from said motor portion forming a terminus of said housing; a motor in said housing; an output coupled with said motor;  
an activation member for activating said motor; a mechanism on said base portion of said housing for receiving a battery pack at the distal end of the handle portion including: a frame;

a cavity in said frame for receiving a battery pack; a member for receiving a member on the battery pack to couple the battery pack with the housing; a biasing member in said cavity, said biasing member for ejecting said battery pack from said housing; and said battery pack received in said receiving member so that the battery pack is in contact with said biasing member such that when the battery pack is secured on said housing, said biasing member is in a compressed condition and when the battery pack is released from the housing, said biasing member ejects the battery pack from the frame.

**B. The rejection of claims 23-38 under 35 U.S.C. § 103(a) is proper and should be affirmed.**

Appellant argues on page 6, that Mooty et al. reference teaches away from Appellant claims; that Mooty et al. operates exactly opposite to the operation of Appellant claims.

In Mooty et al., Appellant further argues that the spring 125 is extended when the battery is locked in the housing; and that spring 125 is compressed when the battery is allowed to be pulled off of the channels 116 and 119; and that the battery is not ejected from the housing by the spring as claimed by Appellant.

Appellee is aware that there are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). *See also* MPEP § 2143.01.

Mooty et al. disclose the invention as claimed except for the battery ejection mechanism spring which compresses when the battery pack is removed and uncompress when the battery

pack is in the frame. The teaching of Maeda et al. was chosen to show Appellant that it is obvious to modify the battery pack ejection mechanism of Mooty et al. with Maeda et al.'s battery pack ejection mechanism.

While Mooty et al.'s battery pack ejection mechanism may differ from the Appellant's battery pack ejection mechanism, ejecting battery pack from a power tool is recognized by those of ordinary skill in the art to be important and convenient feature for a portable cordless power tool. Maeda et al.'s springs 81 are compressed when the battery pack is inserted in the loaded position. Maeda et al. more importantly discloses in column 11, line 4 that the battery pack is thrust out by the biasing force of the counter springs 81, when the lock lever 73 is moved in unlocking direction as shown in Figures 9 and 10.

Appellant has not overcome the *prima facie* burden of obviousness as the Appellee has provided sufficient motivation to reject the claims under Mooty et al. in view of Maeda et al.

The § 103(a) rejection of claims 23 and 29 should be affirmed.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,  
/Nathaniel C. Chukwurah/  
Examiner, Art Unit 3721

Conferees:  
/Rinaldi I. Rada/  
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